



AVINESH PRATAP SINGH

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Education

•  IIT Dhanbad	B.Tech Computer Science	CGPA: 8.9	Dhanbad	12/2020 - 05/2024
• JNV Bangalore	12th(CBSE)	Percentage: 94.2%	Bangalore	06/2019 - 05/2020
• JNV Bahraich	10th(CBSE)	Percentage: 91%	Bahraich	06/2017 - 05/2018

Skills & Relevant Coursework

- C | C++ | Python | JavaScript | MySQL | NodeJs | ExpressJs | ReactJs | MongoDB | Git | Linux
- DSA | DBMS | OOPS | OS | TOC | Computer Network | Software Engineering
- Exploring: Systems Design, AWS.
- [Codeforces](#) - 1753 [Expert](#) PC-1123 | [Codechef](#) - 2189 5  PC-516 | [Atcoder](#) - 1324 [Cyan](#) PC-391 | [Leetcode](#) - 2331 PC-1000
- [Guardian](#) | [Hackerrank](#) - 2377.29 6  [Gold level](#) PC-500

Experience

Software Engineer, Full time	Arista	Bangalore, India	07/2024 - Present
<ul style="list-style-type: none">• Working with languages like C++, Python, Go, JS and technologies like Gerrit, git band, and Linux server.• Building and optimising Core System Software.• CI/CD Pipeline Integration, pull requests, code reviews, unit/integration/e2e testing.			
Software Engineer, Intern	Arista	Bangalore, India	05/2023 - 07/2023
<ul style="list-style-type: none">• Designed and built the Feature, an advanced MPLS packet Static-Routing solution to introduce Symmetric hashing in MPLS routing.• Oversaw 95% of the project lifecycle, including Requirements, System design, rigorous testing, CI/CD Pipeline Integration, pull requests, code reviews, and unit/integration/e2e testing.			
Software Developer, Part-time	TEXMiN	Dhanbad, India	05/2022 - 05/2023
<ul style="list-style-type: none">• Designed and Developed the System to automate a sensor-based Dust Suppression System for Haul Roads in Opencast Coal Mines.• Oversaw 100% of the project lifecycle, including Designing the whole System, Developing and optimising the Algorithms, Deploying and Physical Deployment of Sensor Nodes.			

Projects

Scalable Medicine bottle label Parser	MedLabel Parser	01/2024 - 05/2024
<ul style="list-style-type: none">• Process medicine labels to extract crucial information such as names, compositions, and expiry dates.• Used AWS S3 for image storage, MongoDB NoSQL, for scalable DBMS and employs JWT-based SSO for secure authentication.• Designed a 100% Scalable and highly efficient system through Splitting of Services, Redundancy, Partitions, Cache, Queue, Sharding, for easy deployments CI/CD pipelines, containers, and Kubernetes are taken.		
Energy-Efficient FANET Protocol	EcoFly	08/2023 - 05/2024
<ul style="list-style-type: none">• Implemented Energy-Efficient FANET Protocol for optimised UAV communication in disaster scenarios.• Optimization (IPSO) algorithms for positioning, clustering, selecting cluster head and routing.• Used Matlab for simulation and visualisation and tested with corner cases.		
Loyalty Rewards System	FlipCoin	07/2023 - 12/2023
<ul style="list-style-type: none">• Designed and implemented a cutting-edge blockchain-enabled loyalty and rewards system for E-commerce platforms.• Engineered blockchain-based fungible loyalty points, optimising user engagement and rewards using Smart Contracts and solidity.• Orchestrated instant on-chain settlements, designed rules for token earning, and developed a user-friendly interface for efficient loyalty point management and redemption using ReactJS.		

Responsibility and Mentorship

• Codeism : Instructor at CodeISM-CSE Society of IIT Dhanbad	10/2022 - 03/2024
• BFX : Programming Coordinator at - Being Artifex Programming Technical Society of IIT Dhanbad	04/2021 - 05/2022
• Class Representative of IIT Dhanbad CSE Branch.	08/2023 - 05/2024

Others

- **JEE Advance and JEE Mains**: Secured AIR 2888 in JEE Advance and 99.66 percentile in JEE Mains.
- Published the Research Paper [Prioritization-based Delay Sensitive Task Offloading](#) on Pervasive and Mobile Computing
- **Secured 1st Position** in overall CSE batch in 8th semester with 9.88/10.00 SGPA.
- **Amazon ML SSP** (2022 and 2023) | TOP 100 in **Amazon HackON 2022** |**Qualified Flipkart Grid 5.0 Software Development Track**
- Global Rank **240** in **Google Kickstart 2022 Round F** | Global rank **47** in **Codechef LunchTime 2022** | Global Rank **15** in **Codechef CookOff 2022**